Congressman Luis G. Fortuño
Statement
Space and Aeronautics Subcommittee Hearing on Near-Earth Objects
Committee on Science and Technology
November 8, 2007

Chairman Udall and Ranking Member Feeney,

Every day an enormous quantity of cosmic material falls to the Earth. Most burns up on reentry in a harmless way, however NASA predicts that more than 20,000 large, potentially dangerous objects pass by the Earth in close proximity and, given the proper circumstance could threaten or severely impact our existence. Although the chances of a major impact are slim, the consequences are too great to disregard. I believe we should continue to advance our knowledge of Near Earth Objects and the potential consequences for our life on Earth.

I commend Congressman Rohrabacher on his efforts to continue funding for Near Earth Objects surveillance programs. Since 1992, the Spaceguard program's goal was to discover 90% of the NEOs with one kilometer diameter potential by 2008. Although the success of this program will be substantial, there will still be thousands of objects—ranging from 200 to 500 meters in diameter—that will be overlooked. We must enhance our understanding of this phenomenon by studying and assessing the threats posed to our environment and to our national security.

According to Director Michael Griffin, NASA does not have the funds to carry out a more extensive program. There have been suggestions that NASA and the National Science Foundation should cooperate to fund the construction of a new ground-based telescope to perform tracking functions of Near Earth Objects and other astronomy surveys. I do not think we need to take on such a burden, as there is still a great deal of information to be gained by utilizing the unique capabilities of the Arecibo Observatory in Puerto Rico. As the world's largest and most powerful radio telescope, the Arecibo Observatory is essential to monitoring and surveying Near Earth Objects. However, the National Science Foundation has threatened to close the Observatory in 2011 and NASA has so far been unwilling to assume funding of the radar required for tracking NEOs. Closing the Observatory will severely limit our ability to quickly and accurately refine the orbits of newly emerging threats, and reduce our monitoring capabilities.

This is why I have introduced HR 3737, which directs the National Science Foundation and NASA to work together to ensure continued full funding of the Arecibo Observatory and in particular, the radar. It is my recommendation, and the recommendation of 18 of my colleagues, that these agencies start working collaboratively and reconsider how they allocate their funding.

Mr. Chairman and Ranking Member Feeney, the Arecibo Observatory's radar is the world's most powerful instrument for post-discovery characterization and orbital

refinement of near Earth asteroids. The observations performed with the radar are critical for identifying asteroids that might be on a collision course with Earth. I respectfully urge the committee to consider continuing the important work performed by the Arecibo Observatory and consider, as well, HR 3737 as one potential solution to this challenge. The unique capabilities of radar are critically important as we work towards fulfilling the 2005 congressional mandate of detecting and characterizing 90% of near Earth Objects down to 140 meters in diameter.

A potentially dangerous collision of an asteroid or comet is a very real threat. We must take action now to enhance our awareness to prevent a catastrophe. A better understanding of our skies will not only help us to comprehend the wonders of the Earth's environment, but is essential to assessing the dangers that may threaten our society. The world's most sensitive radio/radar telescope at Arecibo Observatory must not be closed.

Mr. Chairman and Ranking Member Feeney, thanks for the opportunity to provide my views on this issue. I will now ask permission to show in the Committee's flat screen some images of Arecibo Observatory that would help understand the size and magnitude of this extraordinary Science Resource.